

### Amendments to the Claims

This listing of claims will replace all prior versions of claims in the application:

#### **Listing of Claims**

1. (currently amended) An expression cassette capable of directing heterologous protein expression in plant roots, comprising
  - a) ~~nucleotides encoding a~~ MsPRP2 promoter or a fragment thereof, said promoter or fragment comprising a portion of SEQ ID NO:1; ~~and~~
  - b) a MsPRP2 secretion signal; and
  - c) ~~nucleotides comprising a gene for~~encoding a heterologous protein, said nucleotides encoding the heterologous protein being operably linked to the MsPRP2 nucleotides promoter.
2. (currently amended) An expression cassette capable of directing heterologous protein expression in plant roots, comprising
  - a) ~~nucleotides encoding a~~ MsPRP2 promoter of MsPRP2 or a fragment thereof;
  - b) optionally ~~nucleotides encoding~~ a ribosomal binding site;
  - c) ~~optionally~~ nucleotides encoding a MsPRP2 secretion signal; and
  - d) nucleotides encoding a heterologous protein, said ~~protein~~-nucleotides encoding the heterologous protein being operably linked to the MsPRP2 promoter ~~nucleotides~~.
3. (currently amended) The expression cassette of claim 1 further comprising nucleotides encoding transcription factor Alfinl, the nucleotides encoding Alfinl ~~nucleotides~~ being operably linked to another promoter such that the other promoter causes the transcription factor Alfinl to be overexpressed.
4. (previously presented) A plant transfected with the expression cassette of claim 1.
5. (previously presented) A plant cell culture transfected with the expression cassette of claim 1.

6. (currently amended) A method of producing a protein recombinantly in plant cells, the method comprising:

- a. growing plant cells which have been transfected with an expression cassette comprising:
  - i. ~~nucleotides encoding a MsPRP2 promoter of MsPRP2 or a fragment thereof; and~~
  - ii. nucleotides encoding a MsPRP2 secretion signal, wherein the nucleotides encoding the MsPRP2 secretion signal are downstream from the MsPRP2 promoter or fragment thereof; and
  - iii. nucleotides encoding [[the]]a protein, said ~~protein~~-nucleotides encoding the protein being operably linked to the MsPRP2 promoter-~~nucleotides~~; and
- b. growing the transformed cells, during which the transformed cells produce the protein.

7. (currently amended) A method of producing a secreted protein from plant cells, the method comprising:

- a. growing plant cells which have been transfected with an expression cassette comprising:
  - i. ~~nucleotides encoding a MsPRP2 promoter of MsPRP2 or a fragment thereof;~~
  - ii. nucleotides encoding a MsPRP2 secretion signal, wherein the nucleotides encoding the MsPRP2 secretion signal-which are downstream from the MsPRP2 promoter or fragment thereof; and
  - iii. nucleotides encoding [[the]]a protein, said ~~protein~~-nucleotides encoding the protein being operably linked to the MsPRP2 promoter-~~nucleotides~~; and
- b. growing the transformed cells, during which the transformed cells produce the protein.

8. (currently amended) Seeds for plants producing a heterologous protein in its roots, the seeds comprising transgenic plant cells which have been transformed with an expression cassette comprising nucleotides encoding a MsPRP2 promoter of MsPRP2 or a fragment thereof, nucleotides encoding [[the]]a heterologous protein, and optionally a MsPRP2 plant secretion

signal, the ~~protein-nucleotides~~ encoding the heterologous protein being operably linked to the MsPRP2 promoter ~~nucleotides~~ and the secretion signal.

9. (currently amended) A method of bioremediating a field, the method comprising planting the transgenic seeds of claim 8 ~~with or without the secretion signal~~, wherein planting the transgenic seeds bioremediates the field.